

THE GENUS *COPABLEPHARON* IN TEXAS, WITH DESCRIPTION
OF THREE NEW SPECIES (NOCTUIDAE)

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Four species of the genus *Copablepharon*, still unrecorded from Texas, fly in this state. Three of these four species are new and are described in this paper.

Copablepharon grandis Strecker 1875

Fig. 1

Lep. Rhop. Het., 129.

My records for this species are as follows: Paducah, State owned Matador Wildlife Management Area, Cottle Co., Texas: 8 Sept. 1966, 4 ♂; 11 and 13 July 1967, 3 ♂, 3 ♀; 22 Sept. 1968, 1 ♂. These were identified by comparison with a pair of specimens in the Canadian National Collection. There are also, in the collection of the American Museum of Natural History, 1 ♂ and 1 ♀ collected at El Paso, El Paso Co., Texas by A. H. & S. K. Rindge.

Fig. 1 unfortunately fails to show the definite contrast between the pale sulfur yellow of the forewings and the white of the hindwings.

***Copablepharon albisericea* A. Blanchard, new species**

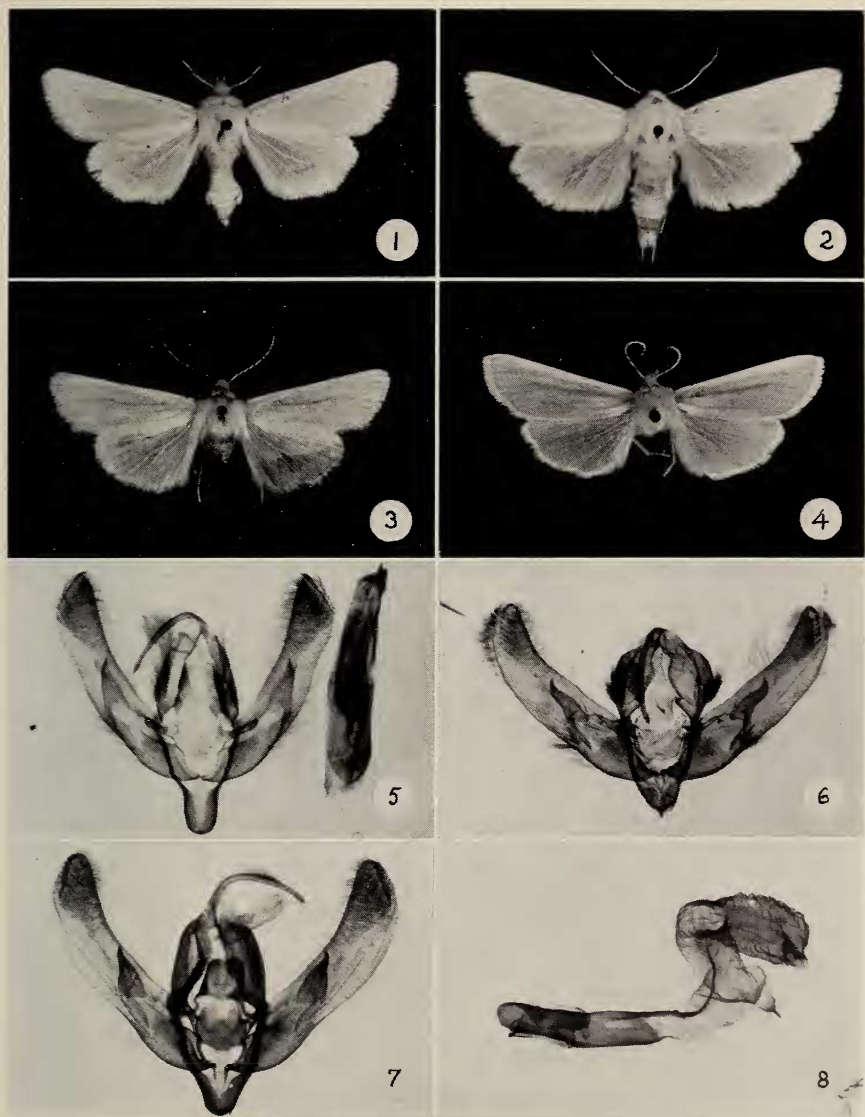
Figs. 2, 5, 9, 13, 14

Head, collar, thorax, tegulae, forewings above, hindwings above and beneath, legs, abdomen shiny silky white (Fig. 2). Forewings beneath more or less soiled with olivaceous in their basal halves between radius and fold. Male antennae weakly serrate, with hair length about half of shaft diameter. Female antennae simple, pubescent. Antennae of both sexes clothed with white scales above, orange below. Wing expanse = 40–43 mm.

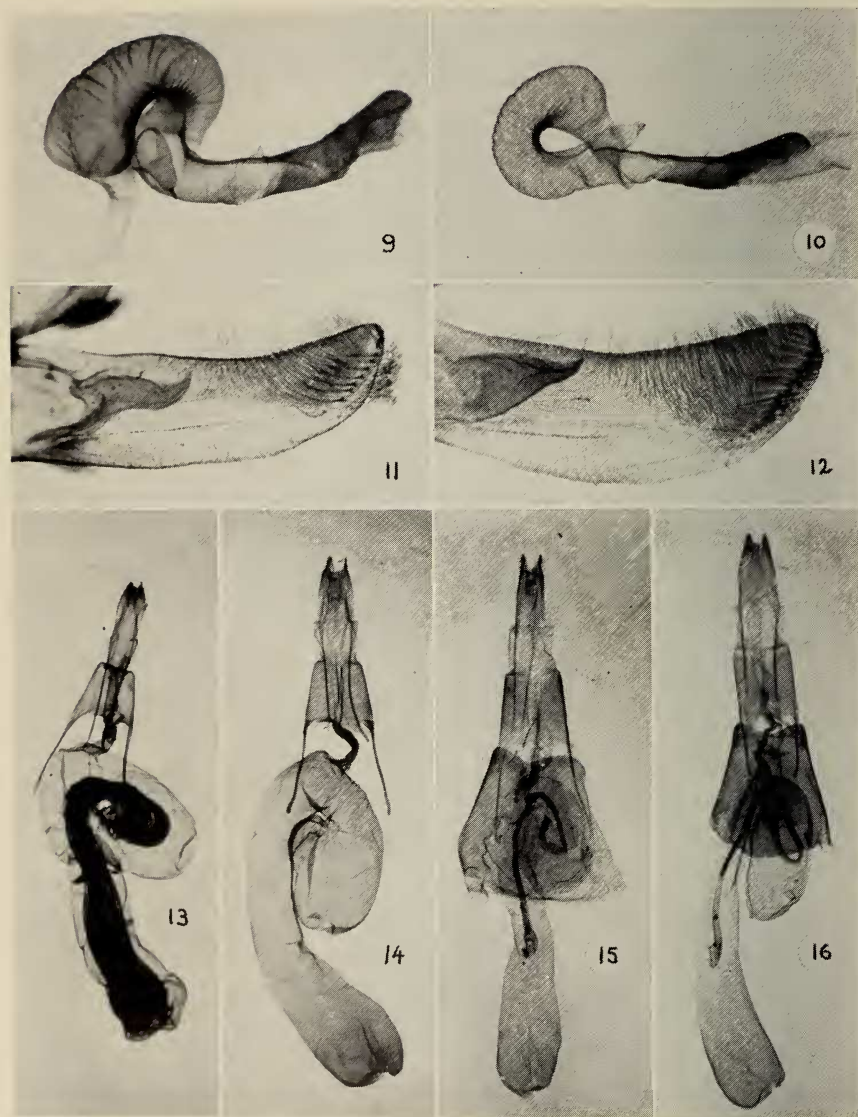
Male genitalia (Fig. 5): Uncus long, cygnate, not dilated in its middle; sides of tegumen broad, penicillus lobes well developed; vinculum narrow with rounded margin; valves long, slender, narrowest two-thirds distance from base where ventral margin and costa are slightly concave, clasper with broad base, tapering to a point; corona of 17–20 spines aligned along distal margin of valve, except near tip where 3–5 get crowded together; clavi slender, digitate, slightly dilated distally; juxta broad, lightly sclerotized; sclerotization of lateral and dorsal parts of annelus at least equal to that of juxta; aedeagus stout, one small conical cornutus located at apex of small diverticulum of vesica (Fig. 9).

Female genitalia (Figs. 13 & 14): Ovipositor cone shaped, lobes clothed near their apex with short, stout setae; anterior apophyses a little longer than sclerotized part of eighth segment collar; posterior apophyses almost twice as long as this collar; ductus bursae short, weakly sclerotized; bursa membranous, with an expanded lateral arm on the right side about half as long as left arm; ductus seminalis from near base of right lateral arm.

Holotype: Male, Canadian, State owned Gene Howe Wildlife Management Area, Hemphill Co., Texas, 27 Sept. 1968 collected by A. & M. E. Blanchard, deposited in the National Museum of Natural History (No. 73431).



Figs. 1-8. *Copablepharon* spp.: 1, *C. grandis* ♀, Paducah, Texas, 11 July 1967; 2, *C. albisericea* ♂, holotype, Canadian, Texas, 27 Sept. 1968; 3, *C. serraticornis* ♂, holotype, Paducah, Texas, 8 Sept. 1966; 4, *C. gillaspyi* ♂, holotype, Padre Island National Seashore, 28 Sept. 1973. Figs. 5-7: ♂ genitalia, aedeagus omitted: 5, *C. albisericea* (A. B. 3555); 6, *C. serraticornis* (Slide COPA 6 in C. N. C.); 7, *C. gillaspyi* (A. B. 3612). Fig. 8: *C. gillaspyi* aedeagus with incompletely inflated vesica (A. B. 3613).



Figs. 9-16. *Copablepharon* spp.: Figs. 9 & 10: Aedeagus with inflated vesica: 9, *C. albisericea* (Slide COPA 5 in C. N. C.); 10, *C. serraticornis* (Slide COPA 6 in C. N. C.). Figs. 11 & 12: Distal part of valve showing corona: 11, *C. serraticornis* (Slide COPA 6 in C. N. C.); 12, *C. gillaspyi* (A. B. 3612). Figs. 13-16: Female genitalia: 13, *C. albisericea* (A. B. 3252); 14, *C. albisericea* (A. B. 3556); 15, *C. serraticornis* (A. B. 3552); 16, *C. gillaspyi* (A. B. 3554).

Paratypes: All from Canadian, Hemphill Co., Texas: 27–30 Sept. 1968, 17 ♂, 3 ♀, collected by A. & M. E. Blanchard, 8 of these ♂ are in the American Museum of Natural History; 27 & 28 Sept. 1968, 37 ♂ collected by D. F. Hardwick, in the Canadian National Collection.

C. albisericea is readily distinguished from *C. alba*, the other white species of this genus: *C. alba* is the only described species of the genus having a very short uncus.

Copablepharon serraticornis A. Blanchard, new species

Figs. 3, 6, 10, 11, 15

Head, collar, thorax, tegulae pale ochreous yellow, darker on vertex, collar and anterior thorax; paler on front, and metathorax (Fig. 3). Male antennae strongly serrate, with each segmental process developed into a thin edge extending laterally and supporting numerous bristles a little longer than shaft diameter. Widest portion of each serration about 2.5 times as wide as narrowest portion. Female antennae simple, very weakly pubescent. Antennae of both sexes clothed above with scales concolorous with front, beneath orange. Forewings above concolorous with thorax; a pale, faint grayish streak along cubitus; fringes concolorous. Hindwings above varying from same hue as forewings but much paler to pale buff; fringes slightly paler than disc. Beneath same hue as above but paler. Wing expanse: Male 36–40 mm; female 40–45 mm.

Male genitalia (Figs. 6, 10, 11): Very close to those of *C. albisericea*, differing from them as follows: Uncus very slightly dilated in its middle; clavi a little stouter and shorter; base of clasper narrower; ventral margin of valve convex all along; corona (Fig. 11) with 11–13 spines in a line which diverges from distal margin of valve as it approaches ventral margin. Vesica (Fig. 10) smaller.

Female genitalia (Fig. 15): Similar to those of *C. albisericea*, differing as follows: Setae on ovipositor lobes stouter and longer; eighth segment collar a little longer; anterior apophyses a little longer than eighth segment collar; posterior apophyses over one and a half times as long as that collar.

Holotype: Male, Paducah, State owned Matador Wildlife Management Area, Cottle Co., Texas, 8 Sept. 1966 collected by A. & M. E. Blanchard; genitalia on slide A. B. 505; deposited in National Museum of Natural History (No. 73432).

Paratypes: All taken at Paducah, Cottle Co., Texas: 8 Sept. 1966, 1 ♀; 22 Sept. 1968, 1 ♂, 4 ♀ collected by A. & M. E. Blanchard; 23 and 24 Sept. 1968, 3 ♂ collected by D. F. Hardwick, in Canadian National Collection.

Copablepharon gillaspyi A. Blanchard, new species

Figs. 4, 7, 8, 12, 16

Head, collar, thorax, tegulae beige (light grayish, yellowish brown) (Fig. 4). Male and female antennae whitish above and structurally similar to those of *C. serraticornis*. Forewings above pruinose beige with a paler whitish, poorly defined fascia along costa extending almost to apex and a grayish streak along cubitus, fringes whitish. Hindwings above concolorous with costal fascia of forewings, paler basally; fringes whitish. Beneath, same color as above attenuated to nearly white. Wing expanse = 39–44 mm.

Male genitalia (Figs. 7, 8, 12): Similar to those of *C. serraticornis*, differing mainly in that the clasper is wider at its base and that the corona (Fig. 12) has over 30 spines crowded in 2–4 rows along distal margin of valve. Aedeagus similar to that of *C. serraticornis* (Fig. 8).

Female genitalia (Fig. 16): Similar to those of *C. serraticornis*, differing mainly in

that the setae on the ovipositor lobes are smaller and cover only the tip of the lobes and that the anterior apophyses are only three fourths as long as the eighth segment collar and the posterior apophyses barely longer than this collar.

Holotype: Male, Padre Island National Seashore, Kleberg Co., Texas, 28 Sept. 1973, genitalia on slide A. B. 3245, Dr. J. E. Gillaspys collector; deposited in the National Museum of Natural History (No. 73433).

Paratypes: Padre Island National Seashore, Kleberg Co., Texas, 28 Sept. 1973, 2 ♂; 7 Oct. 1974, 3 ♂, 1 ♀; J. E. Gillaspys collector. Same location, 29 Sept. 1975, 1 ♂; North Padre Island, Nueces Co., Texas, 30 Sept. 1975, 1 ♂; A. & M. E. Blanchard collectors.

I take pleasure in naming this species for its discoverer, my friend, Dr. J. E. Gillaspys, Professor of Biology at A. & I. College, Kingsville, Texas.

C. serraticornis and *C. gillaspys* are both closely related to *C. serrata* McDunnough, but the antennae of *C. serrata* are not as strongly serrated, their serrations are scarcely more than sharp bulges to the sides; the widest portion of a segment is usually about 1.5 times as wide as the narrow portion, the male valves of *C. serrata* are angled near the apex as those of *C. albisericea* and not evenly convex as those of the other two species.

ACKNOWLEDGMENTS

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